

# Are you interested in doing routine solids NMR but don't need all the performance that comes with the Phoenix HXY Premium Probe?



The Phoenix HX Probe utilizes a similar VT delivery system as the Phoenix HXY Premium probe which gives minimal temperature offset and sample gradient. The probe is compatible with Jeol, Bruker, Varian/Agilent, or Tecmag NMR systems.

#### PROBE COMPARISON:

Option	Phoenix HXY Premium	Phoenix HX
HXY, FXY	✓	-
HFXY	~	-
HX FX	<b>✓</b>	~
HFX	~	~
LOW GAMMA (add-on)	~	~
CLOSELY-SPACED γ's¹ e.g., ²H/¹7O (add-on)	<b>*</b>	-
1.2, 1.6, 2.5, 3.2, 4, 5, 6 mm	~	~
STATIC	~	~
FREQUENCY	400 to 900 MHz	300 to 700 MHz
VT RANGE <sup>2</sup>	-125°C to +125°C	-75°C to +100°C
LOW¹H or ¹9F	~	~
INTERCHANGEABL E PROBE HEAD	<b>✓</b>	<u> </u>

## SOLIDS TEST SAMPLE KITS

PhoenixNMR offers sample kits and individual sample rotors in all rotor sizes. Calibrate pulse widths, set magic angle, measure sensitivity, and check lineshape. These test samples are a great way to validate your system and can be used in troubleshooting whether there is a system issue, a problem with a sample, or the probe. Of note: we supply the D<sub>2</sub>O rotor utilizing our BioSolids sample spacers. The silicone powder sample allows rapid, initial shimming on its  $^1$ H signal to speed setting final lineshape on  $^{13}$ C.

### **TEST SAMPLES**

- Potassium Bromide Magic Angle
- Adamantane -¹H, ¹³C pwgo and ¹³C lineshape
- <sup>15</sup>N labeled Glycine <sup>15</sup>N pw90, <sup>13</sup>C sensitivity for 1.2 and 1.6 mm
- Hexamethylbenzene ¹³C sensitivity for 3.2 mm and larger
- Sodiumhexafluorophosphate 31P, 19F pw90
- Silicone Powder ¹H shimming (much faster)
- D<sub>2</sub>O <sup>2</sup>H pw90

## **BIOSOLIDS and AIR-SENSITIVE SAMPLE PACKING**

PhoenixNMR now offers BioSolids sample spacers and centrifuge sample packing tools to accommodate all your difficult samples: gels, liquids, biosolids, DNP samples, crystalline samples with solvent, moisture and air-sensitive samples. The spacers and tools are available in all standard rotor sizes, 1.2 mm to 6 mm. These tools along with the molded silicone spacers make it easy to efficiently transfer your sample from 200  $\mu$ L ultracentrifuge tubes into a ready to use rotor that will keep your biosolids sample hydrated and other samples contained and air-free.

## **SOLIDS AND BIOSOLIDS ACCESSORIES:**

- Low-gamma Probe Accessory Tune as low as 8 MHz, depending on specific probe configuration
- PhoenixNMR MAS Controller (PMAS Controller)
- Sample Accessories: Available for all rotor configurations, 1.2 mm to 6 mm
  - BioSolids Sample Spacer Kit: includes 10 Silicone Discs, 10 Sample Spacers, 5 Top Caps, Set Tool
  - BioSolids Packing Tools without standard Solids Tools: includes BioSolids Sample Spacer Kit (above) plus Centrifuge Tool and Balance
  - BioSolids Complete Packing Tools: includes tools and spacers above, plus Standard Solids Packing Tools
  - Solids Test Sample Kits and Individual Test Samples (see list above)

